## Missouri Commercial Motor Vehicle Safety Belt Survey Final Report



Submitted by: Missouri Safety Center October 2010

"Paid for with federal highway safety funding by the Missouri Department of Transportation"

## **Executive Summary**

In August of 2010, the Missouri Safety Center in conjunction with the Highway Safety Division of the Missouri Department of Transportation conducted the commercial motor vehicle driver's safety belt use survey. The methodology for this year's survey was identical to the established methodology for the 2004 survey. The survey was conducted at 250 locations in 76 Missouri counties. Survey sites were located throughout the nine Missouri State Highway Patrol (MSHP) Troop areas. The number of sites per Troop was proportional to the percentage of Commercial Motor Vehicle (CMV) Daily Vehicle Miles of Travel (DVMT) each Troop has in comparison to the state-total of 18,100,711 CMV DVMT.

The number of sites per MSHP Troop continues to be assigned proportionally to four roadway types; freeway, expressway, two-lane and other (super 2 lane, 5-lane section, 3-lane section, multi-lane section, and one way) based upon CMV DVMT on each roadway type.

Shoulder belt usage in Class 7 (six to nine tires) and Class 8 (10 or more tires) trucks for the CMV driver was observed at each selected site. Observations were collected over a one week period (August 23-29) and each observation was 40 minutes in length. Twenty-two percent of the vehicles observed were Type 7 vehicles and the remaining 78 percent were Type 8. A total of 18,877 observations were collected in the 76 counties at 250 observational sites.

The following is a list of the major findings.

- The overall safety belt usage rate for commercial motor vehicle drivers observed in the survey was 80.6 percent. This is an increase of 7.2 percent over the 73.4 percent usage rate in 2008.
- The MSHP Troop I region had the highest safety belt usage rate and Troop H region had the lowest with 90.9 and 63.8 percent respectively.
- CMV drivers observed on the "freeway" roadway type had the highest safety belt usage rate of 81.9 percent and drivers on "two-lane" roadways had the lowest usage rate of 71.0 percent.
- There were 12 counties that had a safety belt usage rate of 50 percent or less. They were Johnson, Ray, Schuyler, Taney, Butler, Audrain, Andrew, Daviess, DeKalb, Gentry, Harrison and Nodaway.
- Twenty-seven counties: Bates, Cass, Henry, Jackson, Lafayette, Saline, Linn, Ralls, Lincoln, Pike, St. Charles, St. Francis, St. Louis, Ste. Genevieve, Warren, Barry, Jasper, Lawrence, Vernon, Webster, Boone, Cooper, Gasconade, Montgomery, Osage, Howell, and Phelps had safety belt usage rates between 80 and 89 percent.
- The safety belt usage rate was 90 percent or above in seven counties, Perry, Barton, McDonald, Newton, Crawford, Laclede and Pulaski.
- Commercial motor vehicle drivers of vehicles displaying hazardous material placards had a safety belt usage rate 87.6 percent

## Historic Commercial Vehicle Driver's Safety Belt Usage Rate By MSHP Troop (Data for Restrained Driver Only)

MSHP	Freq. 2004	Usage Rate	Freq. 2005	Usage Rate	Percent Change 04/05	Freq. 2006	Usage Rate	Percent Change 05/06	Freq. 2007	Usage Rate	Percent Change 06/07	Freq. 2008	Usage Rate	Percent Change 07/08	Freq. 2010	Usage Rate	Percent Change 08/10
A	1,707	55.97	1,583	60.35	+ 4.38	1,976	66.82	+ 6.47	2,464	62.9	- 3.9	2,275	72.0	+ 9.1	3,135	79.0	+7.0
В	132	59.73	132	60.27	+ 0.54	105	68.63	+ 6.36	146	78.1	+ 9.5	147	73.5	- 4.6	199	80.6	+7.1
C	2,215	52.08	2,599	67.30	+ 15.22	3,300	63.83	- 3.48	6,066	68.8	+ 5.0	6848	74.8	+6.0	5,332	84.4	+9.6
D	1,266	71.97	1,309	72.88	+ 0.91	1,437	72.72	- 0.16	1,364	76.8	+ 4.6	1,404	77.0	+0.2	1,473	82.8	+5.8
E	773	49.17	775	51.43	+ 2.26	854	57.94	+ 6.51	934	59.5	+ 1.6	1,051	68.3	+8.8	1,092	72.0	+3.7
F	1,459	72.12	1,061	74.56	+ 2.44	961	75.31	+ 0.75	1,276	72.1	- 3.2	1,373	70.3	- 1.8	1,529	77.0	+6.7
G	78	60.47	123	74.55	+ 14.08	161	62.16	- 12.39	257	71.0	+ 8.8	303	79.5	+ 8.5	145	79.8	+0.3
Н	656	59.42	613	56.86	- 2.56	804	63.96	+ 7.10	745	62.2	- 1.8	608	61.4	- 0.8	720	63.8	+2.4
I	794	59.56	1,035	75.55	+ 15.99	888	61.07	- 14.48	1,350	66.5	+ 5.4	1,656	77.8	+ 11.3	1,589	90.9	+13.1
Total	9,080	58.79	9,230	65.73	+ 6.94	10,486	65.64	- 0.09	14,602	67.5	+ 1.9	16,165	73.4	+ 5.9	15,214	80.6	+7.2